BRUHATH BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE ELECTRICAL DIVISION

Office of the Executive Engineer
Electrical Division, Yelahanka Zone
Bruhath Bengaluru Mahanagara Palike

"Schedule B"

Name of the work :- Providing LED Street lighting along with Tubular poles and connected accessories from jakkur Rail Way crossing to Thanisandra Main road (Rail way Parallel Road) in ward no 05 & 06.

Sl. No	Qty	Description Of Work	Unit	Quoted Rates	
				In figures	In words
1	49	Fabricating, supplying and erection of ...Mtrs long hot dip **Galvanized Octagonal pole** with BSEN 10025 grade S 355 JO steel plate for shaft, IS 2062 for base plate with door opening arrangements, including suitable boards, Bakelite sheet and MCBs as per IS specifications suitable to withstand the wind speed of 47 m/sec for .....Mtrs pole in single section and single joint welded as per IS 9595/IS 10178AWS having dimensions bottom .....mm, top....mm with 3mm thick, suitable base plate and 4Nos of long J bolts along with template and the pole shall be hot dip galvanized in single dipping with not less than 65micron as per ASTM-A123 and 153 etc., (excluding foundation) as per drawing appended. **7 meters** - Top 70mm and bottom 130mm dia	Nos	6984.27	Rupees Six Thousand Nine Hundred Eighty Four And Paise Twenty Seven Only
2	49	Supplying, and fixing of Hot dip Galvanized M.S.Bracket suitable for out door luminaries and mounted on Octagonal pole using necessary bolts, nuts etc., complete.Single Arm Bracket with 1500mm Standard 40/50MM dia	Nos	1349.57	Rupees One Thousand Three Hundred Forty Nine And Paise Fifty Seven Only
3	20	Supplying and Fixing of...mm dia class A GI pipe bracket up to 2 Mtrs long bent at suitable angle and fixing to this bracket 1x40/2x40 watts fluorescent tube street light fitting of all capacities to GI or CI or rail or RCC pole / wall using suitable clamps, bolts, and nuts and wiring using suitable capacity wires.Using 32mm dia G.I.Pipe	Nos	533.57	Rupees Five Hundred Thirty Three And Paise Fifty Seven Only
4	69	Supply of LED Streetlight luminaire with pressure die cast aluminium housing body for optimal thermal dissipation. Lamp compartment comprising of anti glare clear diffuser with Injection moulded polycarbonate material, delivering superior light output. Rated life Burning Hrs 50000 hr @ Lumen Maintenance of 70%, maximum light intensity should be between 60 degrees to 70 degrees. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains, Surge Protection- Min 5KV along with Over voltage/ Overload, short circuit/ miss-wiring protection. Compatible for pole mouting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED Light fixture with....W System Power consumption. LED Efficiency>130lm/w, nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008 . Housing with supplier word mark /name shall be Engraved / Embossing on the die cast housing/ Body part. Warranty of 2 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree/Nichia/ Lumileds/Osram make LED Source.LED Streetlight 120 Watts	Nos	5878.80	Rupees Five Thousand Eight Hundred Seventy Eight And Paise Eighty Only
5	69	Fixing halogen/metal halide / SVL / IL / LED floodlight fitting over existing pole / wall ceiling including clamps, bolts, nuts and wiring using suitable capacity wires.	Each	111.83	Rupees One Hundred Eleven And Paise Eighty Three Only
6	2400	Supplying of 1.1 KV LT UG cable XLPE or Heat resistant PVC insulated, PVC extruded Inner sheath armoured UG LT cable as per IS-1554 (Part-1) or IS-7098 Part-1, Armouring strip thickness in average +5% and resistivity 14 Ohms/Kms (Max) as per IS-3975 5) 3.5 core 25 sqmm	Mtr	115.02	Rupees One Hundred Fifteen And Paise Two Only
7	2400	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required. 7) 25 sqmm to 75 sqmm	Rmt	22.37	Rupees Twenty Two And Paise Thirty Seven Only

8	2150	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete.(As per Civil SR KSRB I-2, P-7) 2) In soil (ordinary)	Mtrs	48.56	Rupees Forty Eigh And Paise Fifty Six Only
9	30	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron.. and M.S. flat ... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint. 2) 50x50x6mm	Per Mtr	210.87	Rupees Two Hundred Ten And Paise Eighty Seven Only
10	4	Supplying and fixing Moulded Case Circuit Breaker (MCCB) over the existing wood/panel board using necessary screws, bolts, nuts and wiring complete. Protection of Overload and Short circuit with thermal Magnetic/Micro processor release and Earth Fault as per IS-13947. (Icu = Ics) THREE POLE, 1) 100Amps 25kA.	Each	2894.67	Rupees Two Thousand Eight Hundred Ninety Four And Paise Sixty Seven Only
11	12	Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers. 4) 100Amps	Per Mtr	223.01	Rupees Two Hundred Twenty Three And Paise One Only
12	140000	Fabricating supplying and mounting MS box made out ... SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 7tanks treatment with powder coated paint and finally finished with approved colour etc., complete. 1) 14SWG	Mtr	0.26	Rupees And Paise Twenty Six Only
13	40000	Supplying and fixing hylum plastic sheet 3mm thick with necessary nitches for fixing switches, regulators etc., and fixing on existing wood or metal box using N.F. screws.	Sqcm	0.15	Rupees And Paise Fifteen Only
14	4	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 12 mm dia	No	1916.81	Rupees One Thousand Nine Hundred Sixteen And Paise Eighty One Only
15	20	Supplying and running of GI/Copper strips for grounding connections, using necessary fixing materials as required.25x3mm GI strip	Mtrs	47.93	Rupees Forty Seven And Paise Ninety Three Only
16	16	Supplying and fixing of class A (medium duty) GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV.40mm	Mtrs	214.07	Rupees Two Hundred Fourteen And Paise Seven Only
17	4	Supplying and fixing L.T. cast Iron pot heads suitable for 1.1 KV class UG cable filled with necessary bitumen/insulating compound complete with terminals, clamps, bolts, nuts and washers etc.25Sqmm	Nos	223.65	Rupees Two Hundred Twenty Three And Paise Sixty Five Only
18	40	Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand copper wire with low conductor resistance single core in open or concealed system of wiring with specified IS-694:confirming to latest amendments.10. sqmm	Mtrs	73.49	Rupees Seventy Three And Paise Forty Nine Only
19	800	Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand copper wire with low conductor resistance single core in open or concealed system of wiring with specified IS-694:confirming to latest amendments.1.5 sqmm	Mtrs	13.01	Rupees Thirteen And Paise One Only
20	100	Wiring for lighting/power circuit using one of PVC insulated 1100V grade, stranded Aluminium wire single core in open or concealed system of wiring. 4 sqmm	Mtrs	5.75	Rupees Five And Paise Seventy Five Only
21	49	Providing RCC Foundation for Installation of Octagonal/Tubular Pole of up to 8 mtr Data-rate As per The Drawing and Civil estimate enclosed	Nos	3175.83	Rupees Three Thousand One Hundred Seventy Five And Paise Eighty Three Only

22	4	Thiristor based single/ Three phase smart street light control and monitoring system Remotely control and and monitorable smart street light system by using web or mobile application .smart control system has hardware ruggedness over field issues like line cross, line short, lighting and any other irregularities in voltage. It has some features like 1.Remote lighting management.2.Precise lighting turnoff.3.Load ballancing.4.Load power regulation.5.Status tracking. It works on the basis of some of these features 1) Main Control Unit (Mother board) : Handles controlling , data handling and other communication process. 2) Communication unit: GSM/GPRS quad bandwith RS232 interface wireless communication unit 3) Gate Driver Unit: Firing angle controllable board for driving the thyristor 4) Switching Thyristor: SCR 110 AMPS dual thyristor modules for switching 5) Embedded Firmware: Firmware to control , handle , process the data and communicate it wirelessly.6) Metal Enclosure : IP66 weather prof metal enclosure.7) Transformers: Customized step down transformers for various purposes.8) Wiring and other device assembly components.	Nos	32908.50	Rupees Thirty Two Thousand Nine Hundred Eight And Paise Fifty Only
23	400	Supplying of 1.1KV grade Aerial Bunched Cable Stranded & Compacted Aluminum Phase Conductor, and Stranded Messenger Conductor with all aluminum Alloy, Phase Conductor is insulated with XLPE Compound, insulated Messenger with specified IS-14255:1995 & confirming to GTP of GROUP-A.2 X 25 + 1 X 25 SQ.MM	Per Mtr	92.20	Rupees Ninety Two And Paise Twenty On
24	400	Stringing of 1.1kV grade aerial bunched 3 core cable of XLPE insulation of size (3x95) (for Phase conductor) + (1x70) (insulated messenger neutral) + (1x25) for street light control.	Mtrs	14.35	Rupees Fourteen An Paise Thirty Five Onl
25	20	Supplaying of LT 2 Pin X Arms - MS (Dwg No. BESCOM/GM/QS&S/32 Dtd 24.11.2018	Nos	55.59	Rupees Fifty Five An Paise Fifty Nine Onl
26	23	Supplaying of RCC Pole clamp - MS (Dwg No. BESCOM/GM/QS&S/30 Dtd 24.11.2018)	Nos	33.87	Rupees Thirty Three And Paise Eighty Seven Only
27	36	Supplaying of Piercing Connector Suitable for 16 Sqmm - 95 Sqmm AB Cable - Street Light Connections	Nos	105.44	Rupees One Hundre Five And Paise Fort Four Only
28	4	Supplaying of Dead End Clamp/Anchor Clamp Assembly 25 to 95 Sqmm Bare Messenger(Exclusive of pole clamp and eye hook)	Nos	86.27	Rupees Eighty Six An Paise Twenty Sever Only
29	36	Installation of Insulation piercing connector for main to street light Main : 16-95sqmm, Tap : 1.5-10sqmm(EP95)	Nos	37.70	Rupees Thirty Seve And Paise Seventy Only
30	4	Fixing of Universal/ Dead end Hook	Nos	81.15	Rupees Eighty One And Paise Fifteen On
31	18	Supplay of Suspension Clamp Assembly 16 to 70 Sqmm Bare Messenger(Exclusive of pole clamp and eye hook) 284845 No	Nos	125.24	Rupees One Hundre Twenty Five And Pai Twenty Four Only
32	18	Erection of Suspension Clamp - 25 to 95 sqmm bare messenger		81.15	Rupees Eighty One And Paise Fifteen On
33	3	RCC Pole - 9 Mtr Long, 150 Kg WL Sq Section (Dwg No. BESCOM/GM/QS&S/51 Dtd 24.11.2018) as per IS-785	Nos	4578.44	Rupees Four Thousand Five Hundred Seventy Eig And Paise Forty Fou Only
34	3	Supplaying of LT 4 Pin X Arms - MS (Dwg No. BESCOM/GM/QS&S/32 Dtd 24.11.2018)	Nos	122.05	Rupees One Hundre Twenty Two And Pai Five Only
35	10	Supplaying of 1.1kV Ceramic Pin Insulator (Shell only	Nos	11.50	Rupees Eleven An Paise Fifty Only
36	10	Supplaying of 1.1kV GI Pin FOR 1.1kV Cermaic shell Insulator	Nos	19.17	Rupees Nineteen An Paise Seventeen On
37	8	Supplaying of No.8 Strain Insulator	Nos	10.22	Rupees Ten And Pai Twenty Two Only

38	720	Supplaying of Weasel ACSR (6/2.59 mm Al + 1/2.59 mm St), Std Wt : 128 kgs/km	Mtrs	13.77	Rupees Thirteen An Paise Seventy Seve
39	3	Digging of Pits 1.8 mtr depth for errection of 9 to 10 mtr Long Steel/RCC/PSC supports as per approved Drawing.Ordinary Soil	Nos	265.82	Rupees Two Hundre Sixty Five And Paise Eighty Two Only
40	3	Erection of RCC/PSC poles 9 to 10 mtr long but in a pit of 1.8 mtr depth	Nos	479.25	Rupees Four Hundre Seventy Nine And Paise Twenty Five Only
41	3	Fixing of 4 Pin cross arm with insulator and Braces fixing	Nos	67.73	Rupees Sixty Sever And Paise Seventy Three Only
42	720	Stringing of conductor squirrel, weasel, binding of conductor on each insulator and dead ending on strain or disc/strain insulator by means of clamps for Rabbit ACSR	Mtrs	1.83	Rupees One And Paise Eighty Three Only

For PRASHANTH ELECTRICALS

PROPRIETOR

EXECUTIVE ENGINEER (ELEC)
BBMP, Yelahanka Zone